

Thursday, 17/07/2008 12:31:10 PM

Julie Lecocq

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services		Drawing Name	: SEAT BACK (AFT FACING LH/RH)	
Job Number	: 40588		Part Number	: D37743	
Estimate Number	: 13363		Drawing Number	: D3774 REV <i>X B ref 08.03.12</i>	
P.O. Number	:		Project Number	: N/A	
This Issue	: 17/07/2008	S.O. No. :	Drawing Revision	: A	
Prsht Rev.	: NC		Material	:	
First Issue	: / /	Type : TH THERMOFORMING	Due Date	: 31/07/2008 Qty: <i>6</i> Um: Each	
Previous Run	: 39704			<i>+1</i>	
Written By	:				
Checked & Approved By	: <i>JUL 08.7.17</i>				
Comment	: Est. REV:A New Issue 08.06.04 DL verified by:DD				

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
 		
Comment: HAND FINISHING THERMOFORMING		
	Set up machine program D3774-3	<i>DL - 08.07.18.</i>
	Set up clamping frame as per folio	
2.0	6x MLEXS125F6002904 - M105330	GE PLASTICS LEXAN SHEET
		
	<i>1x MLEXS 093F600607</i>	
	<i>M105 2/94</i>	
Comment: Qty.: 10.6670 sf(s)/Unit Total: 21.3340 sf(s)		
GE PLASTICS LEXAN SHEET		
batch: <i>M105 530</i>		
3.0	HAND FINISH TH	HAND FINISHING THERMOFORMING
		
Comment: HAND FINISHING THERMOFORMING		
	1) Cut Blanks	<i>6x 32" x 44"</i>
		<i>Wh. 08.07.18.</i>
4.0	THERMOFORMING	THERMOFORMING MACHINE
		
Comment: THERMOFORMING MACHINE		
	<i>3774/3</i>	
	Thermoform as per Dwg. D32811 and Folio <i>EIA 011 EIA 021</i>	
Dwg. Rev.	<i>A/B</i>	
Folio Rev.	<i>A.</i>	
		<i>6x MLEXS125F6002904</i>
		<i>2x MLEXS 093F600607</i>
		<i>DL. 08.07.18.</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng Prod Mgr	Approval QC Inspector
08.07.18	4	Pull 1 additional part with MLEXS093F600607 to be used for structural test.	PL	08.07.18.		PL 08.07.25	PL 08.07.25

Part No: D3774-3 PAR #: N/A Fault Category: Thermal forming NCR: Yes No DQA: A Date: 08.08.21
 D412-769-043/044 QA: N/C Closed: D Date: 08.08.26

WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
08.07.18	04.	MLEXS093F600607 x 1 "Too hot" did not form.	PL 08.07.25	Scrap & Replace Qty M 10549Y	08.07.18 N/A	PL 08.08.05	PL 08.08.25	PL 08.07.25
08.07.23	06.	TRIMMED CENTER CUT TOO HIGH. OPERATOR ERROR.	PL 08.07.25	Scrap No replace	08.07.23 N/A	PL 08.08.05	PL 08.08.25	PL 08.07.25
08.08.12	08.	I unit used for Structural test	PL QST 042 08.08.12	Retain for R&D	08.08.12 N/A	PL 08.08.12	PL 08.08.12	PL 08.08.12
08.08.12	4	I unit made with .063" not used for test.		Scrap I unit M 10549Y	08.08.12 N/A	PL 08.08.12		PL 08.08.12

NOTE: Date & initial all entries

Date: Thursday, 17/07/2008 12:31:10 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SEAT BACK (AFT FACING LH/RH)

Job Number: 40588

Part Number: D37743

Job Number:



Seq. #: Machine Or Operation:

Description :

5.0 QC2

INSPECT PARTS AS THEY COME OFF MACHINE



DL 08/07/08

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

6.0 HAND FINISH TH

HAND FINISHING THERMOFORMING



Comment: HAND FINISHING THERMOFORMING

1) Trim to Finished Dimensions

BB 08/07/24 X

AB 25

7.0 QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT TRIMMED PARTS

1) Check dimensions to ensure conformity to drawing tolerances.

BB 08/07/24 X

PTO

8.0 QC5

INSPECT WORK TO CURRENT STEP



BB 08/07/24 (4)

Comment: INSPECT WORK TO CURRENT STEP

9.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

SB 08/08/15

(4)

Comment: FINAL INSPECTION/W/O RELEASE



08/08/15

Job Completion



CMF 08-08-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
08.03.12	7	DIMENSION 1.0 is 0.6 0.6 (ZN C4-3) WIDTH OF CUTOUT IS 2.4 (ZN C7-3) AS TESTED - ACCEPTABLE DEVIATION NON-STRUCTURAL	PY	08.03.12	4	R4 08.03.12 QSI 042	J 080812

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	WORK ORDER:	40598
Description: Seat Back (Aft Facing)	Part Number:	D37743
Inspection Dwg: D3774 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

*FOR
TESTING
RETAIN
FOR R AND P*

(Step 4) Thermoforming Visual Inspection Sign-off

Description	Initials
Acceptable shape definition	<i>BS</i>
Free of visual flaws (bumps, cracks, voids, etc.)	<i>BS</i>

(Step 6) Trimming FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. _____ and record below

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.3"	+/- 0.100"	1.296	✓			
1.9"	+/- 0.100"	1.88	✓			
33.9"	+/- 0.100"	34	✓			
0.100"	MIN	.86		✓		
0.150"	MIN	113		✓		
0.150"	MIN	120		✓		
0.150"	MIN	112		✓		
0.150"	MIN	.99		✓		
0.150"	MIN	113		✓		
0.150"	MIN	112		✓		
0.150"	MIN	107		✓		

0.06

MIN

*AS 0.055
0.055*

✓

*bumps
removed*

Measured by: <i>BS</i>	Audited by: <i>BS</i>	Prototype Approval:
Date: 08/07/24	Date: 08/07/24	Date:

Rev	Date	Change	Revised by	Approved
		New Issue		

DART AEROSPACE LTD	WORK ORDER:	40588
Description: Seat Back (Aft Facing)	Part Number:	D37743
Inspection Dwg: D3774 Rev: A/B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

(Step 4) Thermoforming
Visual Inspection Sign-off

Description	Initials
Acceptable shape definition	BB
Free of visual flaws (bumps, cracks, voids, etc.)	BB

(Step 6) Trimming
FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. ___ and record below

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.3"	+/- 0.100"	1.27	✓			
1.9"	+/- 0.100"	1.93	✓			
33.9"	+/- 0.100"	34	✓			
0.100" 0.085"	MIN	101	✓			
0.150" 0.100"	MIN	136	✓			
0.150"	MIN	137	✓			
0.150"	MIN	121	✓			
0.150"	MIN	130	✓			
0.150"	MIN	119	✓			
0.150"	MIN	132	✓			
0.150" 0.100"	MIN	127	✓			

Measured by: BB	Audited by:	Prototype Approval:
Date: 28/07/24	Date: 06/08/24	Date:

Rev	Date	Change	Revised by	Approved
		New Issue		

DART AEROSPACE LTD	WORK ORDER:	40588
Description: Seat Back (Aft Facing)	Part Number:	D37743
Inspection Dwg: D3774 Rev: A/B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

First Article Prototype

(Step 4) Thermoforming
Visual Inspection Sign-off

Description	Initials
Acceptable shape definition	BB
Free of visual flaws (bumps, cracks, voids, etc.)	BB

(Step 6) Trimming
FAI Checklist

Inspect dimensions highlighted on inspection sheet drawing _____ Rev. ___ and record below

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.3"	+/- 0.100"	.125	✓			
1.9"	+/- 0.100"	.191	✓			
33.9"	+/- 0.100"	.33.95	✓			
0.100" 0.085	MIN	.102	✓			
0.150" 0.100	MIN	.132				
0.150"	MIN	.133				
0.150"	MIN	.118				
0.150"	MIN	.135				
0.150"	MIN	.127				
0.150"	MIN	.146				
0.150" 0.100	MIN	.141	✓			

Measured by:	BB	Audited by:		Prototype Approval:	
Date:	08/07/24	Date:	08.08.12	Date:	

Rev	Date	Change	Revised by	Approved
		New Issue		



Attn: CHANTAL

GE Polymershapes

1250 OLD INNES RD. 519 OTTAWA,ONT. K1B 5L3
TEL: 613 745 7043 FAX: 613 745 8163

CERTIFICATE OF COMPLIANCE

SOLD TO: DART AEROSPACE

DATE: 8/17/2007

YOUR PURCHASE ORDER : PO00004161

OUR SHIPPER NO: 078178

LINE ITEM #.1

QUANTITY: 81

DESCRIPTION: F60029 LEXAN GY3778 325 X 48 X 96

THESE PARTS WERE MANUFACTURED IN ACCORDANCE WITH: FAR 25. 853

THIS IS TO CERTIFY THAT THE MATERIAL FINISHES AND FUNCTIONAL REQUIREMENTS
OF THE ABOVE LISTED PARTS ARE IN ACCORDANCE WITH THE REFERENCE
PROCUREMENT SPECIFICATIONS, CONTROL DRAWINGS OR PARTS DESIGNATION AND
LATEST REVISIONS AS REFERENCED ON THE SUBJECT PURCHASE ORDER.

AUTHORIZED REPRESENTATIVE SIGNATURE

Jon Caldwell

JON CALDWELL
BRANCH MANAGER

Receiving Report

Date:

07/08/16

Batch No:

M10530

Supplier:

G. Polymershapes

Dart P/O:

4161

Packing Slip: Yes No
 Invoice: Yes No
 Receipt: Cash Cr

Release Note Attached: Yes No N/A
 Waybill Attached: Yes No
 Shipment Complete: Yes No N/A
 QC6 Inspection On Hold Yes No N/A
 Work Order _____ N/A

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12 EJP

Production/Admin:

Date

Received/Costing

Initial

07/08/16
RIP 5411
GT

Location

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

** PLEASE NOTE: IF YOU WOULD LIKE TO HAVE FUTURE INVOICES
FAXED OR E-MAILED TO YOU PLEASE MAIL OR FAX A COPY OF THIS
INVOICE TO OUR BRAMPTON LOCATION WITH YOUR INFORMATION**
THANK YOU
EMAIL/FAX INFO _____

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7

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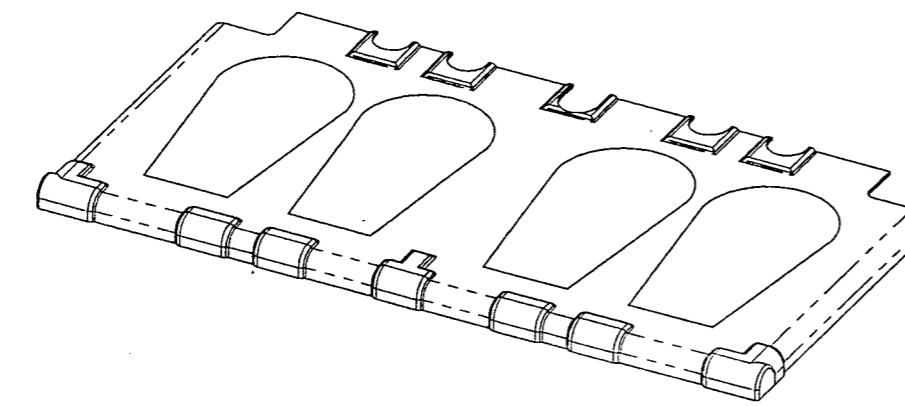
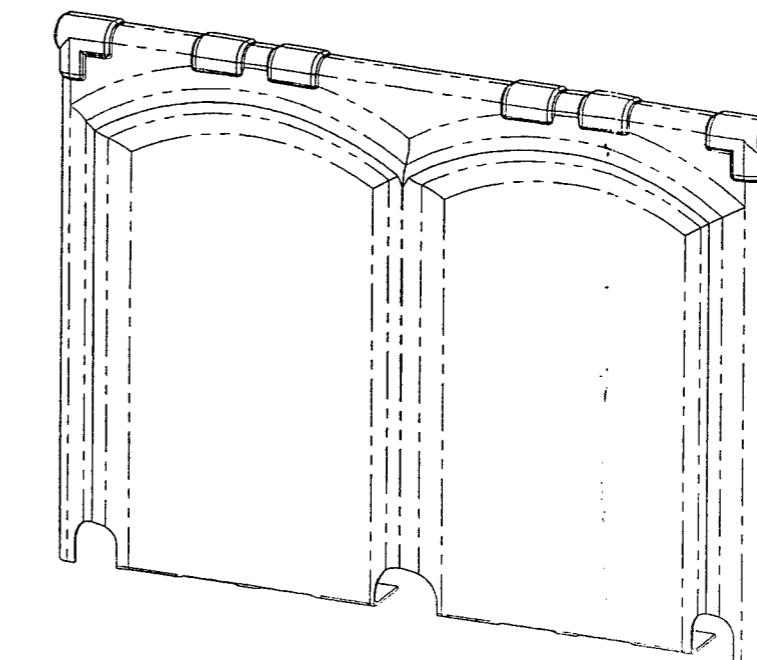
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4

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2

1

D3774-1 SEAT BOTTOMD3774-3 SEAT BACK

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 40588

RELEASED
08-08-11/MF

B	UPDATE CUTCUT DIMENSIONS (ZN D4-2, D6-2, C4-3, C7-3); UPDATE MINIMUM THICKNESS (ZN A5-2, A5-3); ADD HOLES ON D3774-3 (ZN B6-3) REASON: MANUFACTURING CAPABILITIES			PH	08.07.25
A	NEW ISSUE			HS	08.06.23
REV.	DESCRIPTION			BY	DATE
DESIGN	HS	DART AEROSPACE LTD			
DRAWN	<u>MF</u>	HAWKESBURY, ONTARIO, CANADA			
CHECKED	<u>AS</u>	DRAWING NO.			
MFG. APPR.	<u>DP</u>	REV. B			
APPROVED	<u>MF</u>	D3774			
DE APPR.	<u>MF</u>	SHEET 1 OF 3			
DATE	08.07.25	TITLE			
		SCALE			
		NTS			
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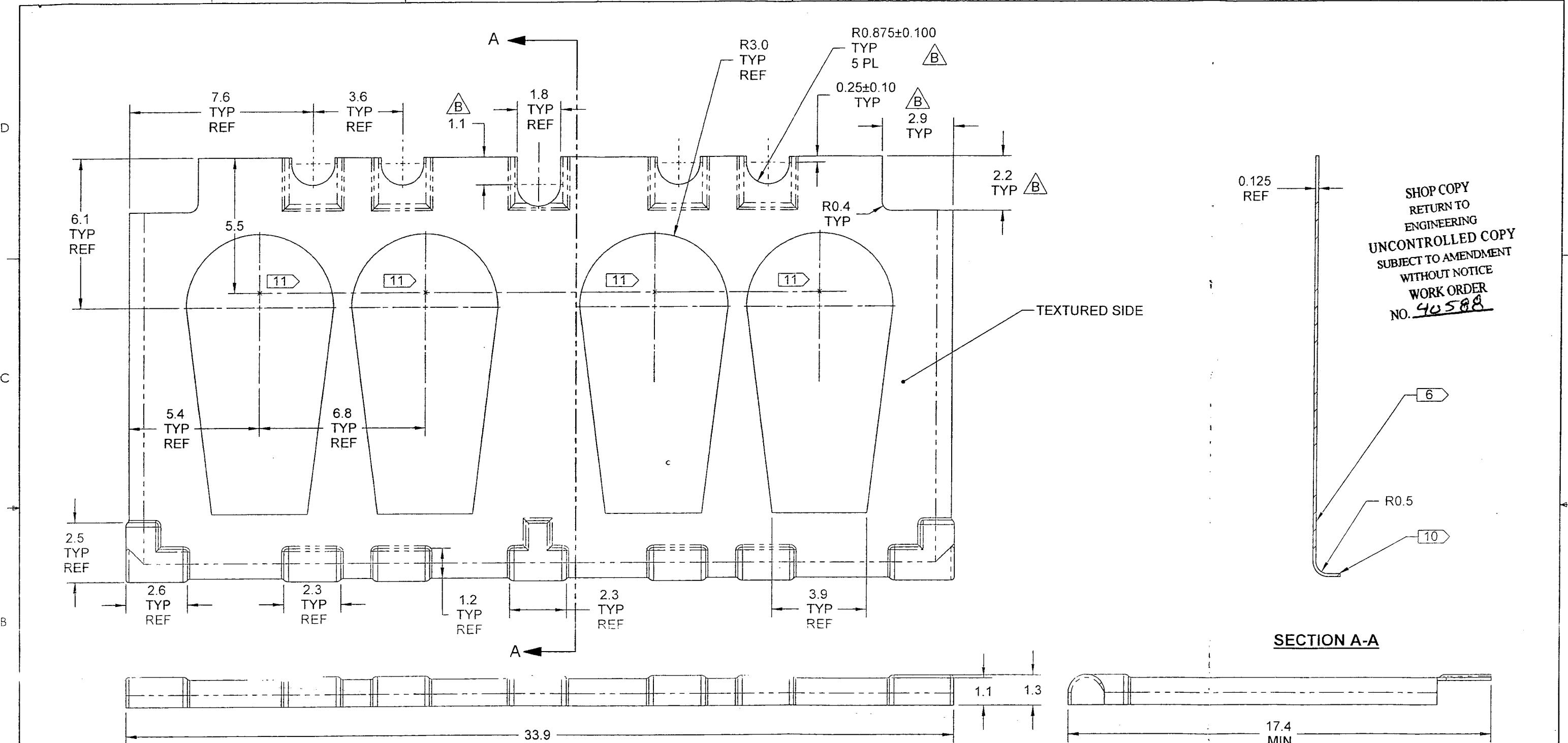
4

3

2

1

8 7 6 5 4 3 2 1



D3774-1 SEAT BOTTOM

NOTES:

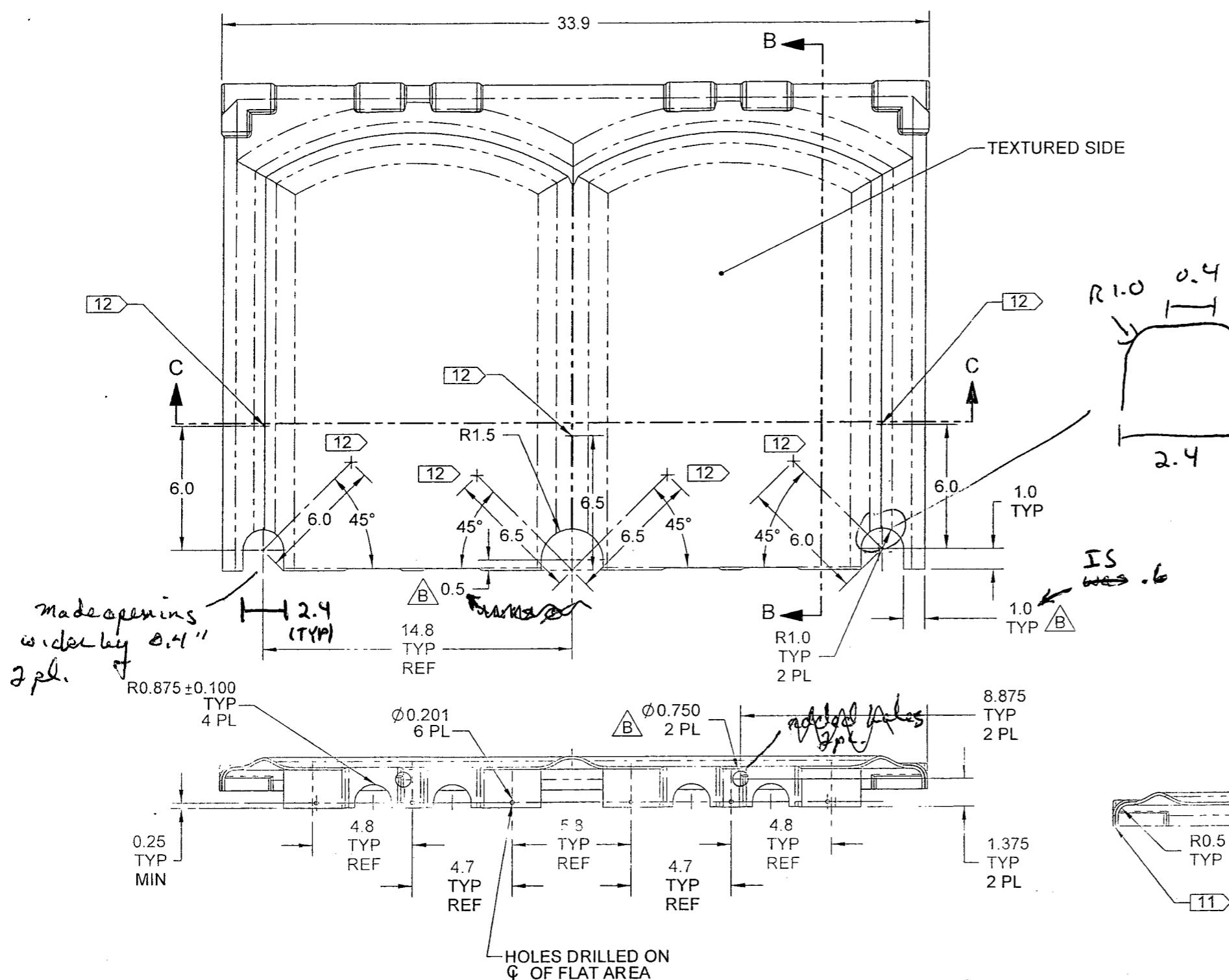
- 1) MATERIAL: F60029 GREY LEXAN SHEET (HEAVY HAIRCELL TEXTURE) 0.125" THICK TEXTURED SIDE UP (REF. DART SPEC MLEXS.125-F60029-04)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3774-1" USING VIBRATING STYLUS
- 7) WEIGHT: 2.93 lbs
- 8) PART TO BE PRODUCED FROM MOLD DT9022 AND PER DART QSI 022
- 9) OVERALL DIMENSIONS GIVEN ONLY FOR FURTHER INFORMATION REFER TO MOLD DT9022
- 10) MINIMUM MATERIAL THICKNESS AFTER FORMING ON FLANGES (WITHIN 2.0 FROM EDGES) IS 0.085
- 11) MINIMUM MATERIAL THICKNESS AFTER FORMING AT THESE POINTS IS 0.100

B

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	A	
CHECKED	B	
MFG. APPR.	C	
APPROVED	D	
DE APPR.	E	
DATE	08.07.25	
DRAWING NO.	D3774	REV. B
TITLE	SEAT	SHEET 2 OF 3
SCALE	NTS	
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RELEASED
08.08.11 MPD

7 6 5 4 3 2 1

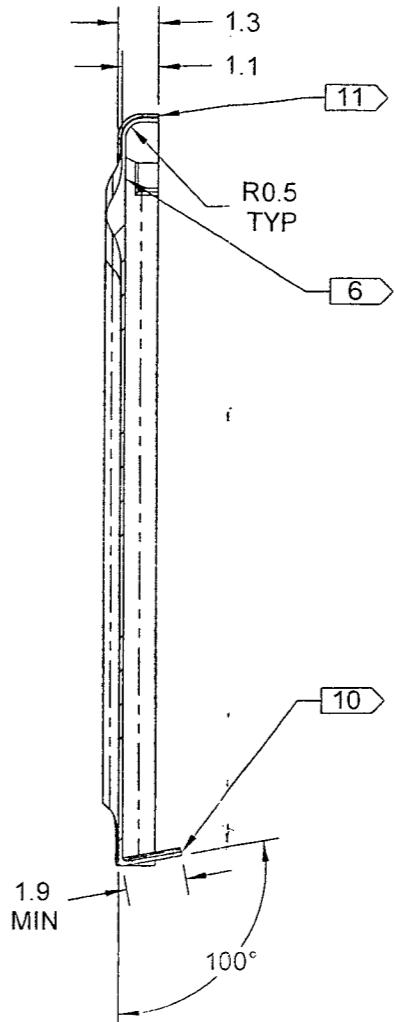


D3774-3 SEAT BACK

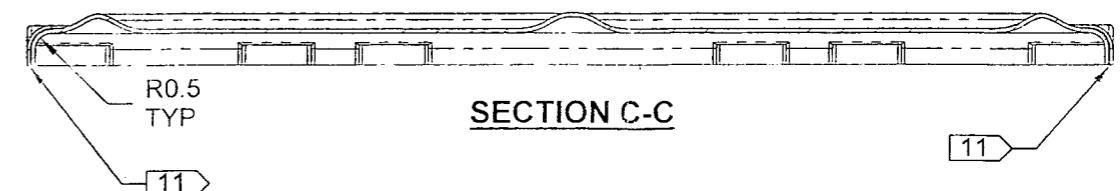
NOTES

- NOTES:**

 - 1) MATERIAL: F60029 GREY LEXAN SHEET (HEAVY HAIRCELL TEXTURE) 0.125" THICK TEXTURED SIDE UP (REF. DART SPEC MLEXS.125-F60029-04)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3774-3" USING VIBRATING STYLUS
 - 7) WEIGHT: 4.82 lbs
 - 8) PART TO BE PRODUCED FROM MOLD DT9023 AND PER DART QSI 022
 - 9) OVERALL DIMENSIONS GIVEN ONLY FOR FURTHER INFORMATION REFER TO MOLD DT9023 ~~0.25 - 0.6~~
 - 10) MINIMUM MATERIAL THICKNESS AFTER FORMING ON BOTTOM FLANGE IS 0.065
 - 11) MINIMUM MATERIAL THICKNESS AFTER FORMING FLANGES (WITHIN 2.0 FROM EDGES) IS 0.085 ~~0.05 - 0.100~~
 - 12) MINIMUM MATERIAL THICKNESS AFTER FORMING AT THESE POINTS IS 0.100 ~~0.05 - 0.150~~ B



SECTION B-B



SECTION C-C

RELEASED
08-05-88 M

DESIGN	HS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	PEA		
CHECKED	AS	DRAWING NO.	REV. B
MFG. APPR.	WJ	D3774	SHEET 3 OF 3
APPROVED	WJ	TITLE	SCALE
DE APPR.	AM	SEAT	NTS
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